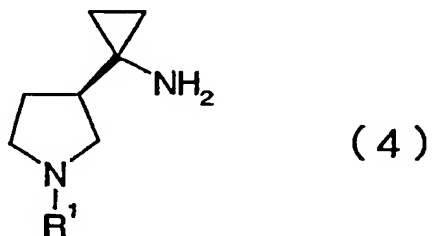


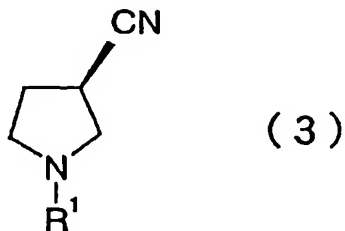
### Abstract

The present invention provides intermediates needed for production of an optically active compound represented by formula (6), which enable the compound (6) to be readily synthesized in simple production steps without optical resolution, and also provides a process for producing the intermediates.

A process for producing an optically active compound represented by formula (4):



wherein  $R^1$  represents a protecting group for the amino group, or a salt thereof, characterized in that a reagent prepared from an titanium(IV) reagent and an alkylmetal compound is reacted with an optically active compound represented by formula (3):



wherein  $R^1$  has the same meaning as defined above, if needed, in the presence of a Lewis acid.